

IN THE SPECIFICATION

In regard to the first requirement of providing a marked-up version of the replacement paragraph, Applicants provide below a clean version of each amended paragraph. A marked-up version of each amended paragraph is also enclosed as Attachment A. Note that a marked-up version of the cross-reference information at page 1 was previously provided. This paragraph has been reproduced in this paper to prevent any further confusion.

On page 1, please **replace** the paragraph spanning lines 5-9 with the following paragraph:

af
8-7-03
B1
This application is a continuation of copending U.S. Patent Application Serial No. 09/660,208, filed on September 12, 2000, ^{now abandoned,} which is a divisional of U.S. Patent Application Serial No. 08/574,999, filed December 1995, now U.S. Patent No. 6,224,681, which is a File Wrapper Continuation of application number 08/278,984, filed July 22, 1994, now abandoned, which is a File Wrapper Continuation of original application number 07/990,755, filed December 15, 1992, now abandoned, which are all incorporated by reference. This application is related to previously-filed copending U.S. Patent Application Serial No. 07/912,024, filed July 9, 1992, (now U.S. Pat. No. 5,419,924), which is a continuation of Serial No. 07/626,274, now abandoned.

On page 4, please **replace** the paragraph spanning lines 3-7 with the following paragraph:

B2
An advantage of the invention is that the vaporizer forms vapor by expansion in a pressure gradient, rather than evaporation by heating, and therefore can vaporize liquid at high flow rates such as those needed for some semiconductor fabrication processes.

On page 6, please **replace** the paragraph spanning lines 19-25 with the following paragraph:

B3
Remotely controllable (e.g., pneumatic) valves 13 and manual valves 15 are inserted on each line. These valves are opened and closed to enable normal operation and purge and evacuation operations. To enhance safety and fault-tolerance, each line having a remotely controlled valve 13 also has a manual valve 15 which can be closed manually if the remotely controlled valve fails.

On page 7, please **replace** the paragraph spanning lines 16-29 with the following paragraph:

B4
The piezo valve may be implemented with a commercially available piezo-electric valve, such as model IV1000 or IV2000 type, obtainable from STEC, Kyoto, Japan. In one embodiment, the valve typically operates at a flow rate of 0.3-0.6 grams/minute, in which case the gap between the diaphragm 54 and opening 49 is approximately 10 μm . (Excessive gap height can cause undesirable turbulence in the control valve bore 50.) In this embodiment, the piezo-electric valve can be selected to provide a 0-30 μm gap adjustment range, e.g., at an input voltage of 0 Volts, the gap is 0 μm , at an input voltage of 5 Volts, the gap is 10-15 μm , and at an input voltage of 15 Volts, the gap is 30 μm . Thus, the piezoelectric valve not only provides liquid flow control, but can also operate temporarily to fully shut off liquid flow.